

Amendments to the Specification:

Page 11, amend the paragraph beginning on line 5 to read as follows.

Explanation of the temperature adjustment is given hereunder. The temperature of the medium ~~24~~ 241 and/or 242 as shown in Fig. 2, for example, is controlled by a temperature adjustment means (device), not shown, based on the information from the temperature sensor 23 on the top table 21 so as to adjust the temperature of the sample-setting portion accordingly via the guide support 17. The heat change resulting from the temperature adjustment is transferred in the following sequence, and can be detected by the temperature sensor 23 installed near the sample 5. That is, the heat transfers in sequence from the X-axis fixed side guide members 181 and 182 to the X-axis moving side guide members 183 and 184, elastic body 22, moving table 19, Y-axis fixed side guide members 201 and 202, Y-axis moving side guide members 203 and 204, and to the top table 21.

Page 15, amend the paragraph beginning on line 25 to read as follows.

Fig. 8 shows typical gas lubrication under vacuum, used in the above embodiments of the invention. The gas outgoing from a porous bearing 28 flows through the gas exhaust groove ~~28~~ 30, installed as if surrounding the porous bearing, and then exhausted by a vacuum pump, not shown, so as to maintain the degree of vacuum in the sample chamber. Generally, in the case of gas-lubrication type guide, the clearance ΔG between the fixed side guide member (stage base) 161 and moving side guide member (moving table) 191 is as small as several to tens [μm]. Because of this, the heat is exchanged between the fixed side guide member 161 and moving side guide member 191 via the fluid flowing in the clearance, and the heat of the fixed side guide member 161 is transferred to the moving side guide member 191. Besides, if the distance ΔL from the porous bearing 28 to the gas exhaust groove ~~28~~ 30 is longer, thermal contact area becomes wider and so the heat exchange between the fixed side guide member 161 and moving side guide member

191 becomes easier. 31 denotes an exhaust pipe and 32 denotes a gap sensor.

Page 16, amend the paragraph beginning on line 19 to read as follows.

In this embodiment, for the moving table 191, heat is exchanged between the guide bars 189 and 209, which are thermally connected to the fixed side guide member 161 opposite to the moving table, and stage base 161, and so the top table 21 can be set to a desired temperature. ~~If the coefficient of thermal expansion is different between the fixed side guide member 161 and stage base 161, and if a similar temperature change is caused, the fixed side guide member 161 and stage base 161 deforms because the quantity of thermal expansion or contraction is different, resulting in deteriorated position accuracy.~~ The fixed side guide member 161 is deformed by the thermal expansion or the thermal contraction, resulting in deteriorated position accuracy. In addition, if the deformation is great enough to exceed the clearance between the fixed side guide member 161 and moving side guide member 191, scuffing is caused between the guide members and so the gas lubrication itself may not remain functional. To prevent the above problem, as aforementioned, a number of temperature sensors 23 are installed on the fixed side guide member 161 and moving side guide member 191 so as to control the temperature or flow rate of the heat-exchanging medium independently, taking into account the coefficient of thermal expansion of each component. Besides, as shown in Fig. 8, the above can also be prevented where a gap sensor 32 capable of detecting minute displacement is installed on the moving side guide member 191 to measure the gap ΔG to the fixed side guide member 161 and the temperature of each guide is controlled so that the gap variation due to the temperature change becomes less. For example, for the temperature of the top table 21, the temperature of the ~~stage base 161~~ fixed side guide member 161 is mainly adjusted and the temperature of the fixed side guide member 161 is also controlled based on the information from the gap sensor 32. With this control, the top table 21 can be set to a desired temperature while preventing the deformation of each component.